PATENT
ATTORNEY DOCKET NO.: TNX00-04
CUSTOMER NO: 26839

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:
FUNG, Michael, et al.

Serial No.: 09/816,839

Filed: March 23, 2001

For: ANTI C2/C2a INHIBITORS OF COMPLEMENT ACTIVATION

Group Art Unit: 1645

Examiner: TO BE ASSIGNED

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

PRELIMINARY AMENDMENT

Prior to the examination of this application, please enter the following amendments to the disclosure:

IN THE SPECIFICATION:

Please substitute the attached page 8 for the original page 8. Applicants provide a marked up copy of page 8 to indicate the amendments made.

Page 4, line 15, please delete "Mab" and insert –MAbs--.

Page 4, line 16, please delete "they" and insert –the latter--.

Page 15, line 17, please delete "Mab" and insert –Mab-- therefor.

Page 17, line 18, please delete the second "µl".

Page 19, line 12, after "background", please insert --)--.

REMARKS

The amendments to the disclosure at pages 4, 15, 17, and 19, correct typographical errors. The amendments at page 8 are intended to clarify the language of the specification. No new matter has been introduced by these amendments.

Respectfully Submitted,

Dated: June 1, 2001.

BY: Cheryl A. Liljestrand
Cheryl A. Liljestrand
Reg. No. 45,275

BRIEF DESCRIPTION OF THE FIGURES

Fig. 1 shows the binding of anti-C2a MAbs (175 series), anti-C5 Mab (137-76), and anti-factor D Mab (166-32) to purified human C2a in an ELISA. The Y-axis represents the reactivity of the MAbs with C2a expressed as optical density (OD) at 450 nm and the X-axis represents the concentration of the MAbs. MAb 175-62 shows the strongest reactivity with C2a.

Fig. 2 shows the inhibition of classical pathway hemolysis of sensitized chicken red blood cells (RBCs) by anti-C2a MAbs in the presence of 3% human serum. The controls were anti-factor D Mab (166-32) and the anti-C5 MAb (137-76). Anti-factor D Mab 166-32 specifically inhibits the alternative complement pathway, therefore it does not inhibit the classical pathway hemolysis. The Y-axis represents the % hemolysis inhibition, as further described in the text. The X-axis represents the concentration of the MAbs. All anti-C2a MAbs strongly inhibit classical pathway hemolysis.

Fig. 3 shows that anti-C2a MAb 175-62 inhibits classical pathway (CP) hemolysis at a molar ratio of 1:2 (MAb 175-62 to C2). The filled circles represent MAb 175-62. The open squares represent hemolysis in the absence of MAb 175-62. The Y-axis represents the % hemolysis inhibition. The X-axis represents the concentration of serum. The classical pathway hemolytic activity of C2 (0.2 μM) in normal human serum is completely inhibited when the serum was pre-treated with 0.1 μM of MAb 175-62.

Marked Up Version

BRIEF DESCRIPTION OF THE FIGURES

Fig. 1 shows the binding of anti-C2a MAbs (175 series), anti-C5 Mab (137-76), and anti-factor D Mab (166-32) to purified human C2a in an ELISA [assay]. The Y-axis represents the reactivity of the MAbs with C2a expressed as optical density (OD) at 450 nm and the X-axis represents the concentration of the MAbs. [Mab] MAb 175-62 shows the strongest reactivity with C2a.

Fig. 2 shows the inhibition of classical pathway hemolysis of sensitized chicken red blood cells (RBCs) by anti-C2a MAbs in the presence of 3% human serum. The controls were anti-factor D Mab (166-32) and the anti-C5 [Mab] MAb (137-76), [which both] Anti-factor D Mab 166-32 specifically inhibits the alternative complement pathway, therefore it does not inhibit the classical pathway hemolysis. The Y-axis represents the % hemolysis inhibition, as further described in the text. The X-axis represents the concentration of the MAbs. All anti-C2a MAbs strongly inhibit classical pathway hemolysis.

Fig. 3 shows that anti-C2a MAb 175-62 inhibits classical pathway (CP) hemolysis at a molar ratio of 1:2 (MAb 175-62 to C2). The filled circles represent MAb 175-62. The open squares represent hemolysis in the absence of MAb 175-62. The Y-axis represents the % hemolysis inhibition. The X-axis represents the concentration of [the MAbs] serum. The classical pathway hemolytic activity of C2 (0.2 μM) in normal human serum is completely inhibited when the serum was pre-treated with 0.1 μM of MAb 175-62.